

DETAILED IMPLEMENTATION PLAN CHILD SURVIVAL XVII

**CARE / MOZAMBIQUE
OCTOBER 1, 2001-SEPTEMBER 30, 2006
COOPERATIVE AGREEMENT NO.
HFP-A-00-01-00038-00**

SUBMITTED APRIL 15, 2002

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ACRONYMS AND TRANSLATIONS

AIDS	Acquired Immunodeficiency Syndrome
APE	A community health worker trained by the MOH and supplied with limited medicines and supplies (<i>Agente Polivalente Elementar</i>)
Bairro	Portuguese term for a neighborhood or population group within a city, town or village
CARE	Cooperative for Assistance and Relief Everywhere
CHV	Community Health Volunteer
DDS	District Health Department (<i>Direcção Distrital de Saúde</i>)
DHS	Demographic and Health Survey
DIP	Detailed Implementation Plan
DPS	Provincial Health Department (<i>Direcção Provincial de Saúde</i>)
DPT	Diphtheria, Pertussis, Tetanus
EPI	Expanded Program of Immunization
HIV	Human Immunodeficiency Virus
HKI	Helen Keller International
HSC	Health Sector Coordinator
IEC	Information, Education and Communication
IFA	Iron Folic Acid
ITN	Insecticide Treated Nets
IMCI	Integrated Management of Childhood Illness
LAM	Lactational Amenorrhea Method
MOH	Ministry of Health
NGO	Non-governmental Organization
OPV	Oral Polio Vaccine
ORT	Oral Rehydration Therapy
PSI	Population Services International
PVO	Private Voluntary Organization
STI	Sexually Transmitted Infection
TT	Tetanus Toxoid

VIDA	Viabie Initiatives in the Development of Agriculture, CARE's agriculture project in Nampula
WHO	World Health Organization
WRA	Women in Reproductive Age

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SECTION I: PROGRAM DESCRIPTION

A. Executive Summary

This Child Survival XVII Project will be implemented in two districts located in the western part of Nampula Province in northern Mozambique. Nampula Province is a high priority for the government of Mozambique, USAID and many donors due to its exceedingly poor health statistics and high levels of poverty, yet with a great potential for economic growth and development. CARE currently implements projects in agriculture, micro-finance and reproductive health. This new CS XVII project will build on CARE's wide programming experience in Nampula and strengthen its household livelihood security approach to development.

The total population of the two districts is approximately 259,000 inhabitants, with about 49,000 children under five years of age, and 63,000 women of reproductive age.¹ With a crude birth rate of 55.1 per 1,000 inhabitants in rural Nampula, it can be estimated that about 74,500 births will occur during the life of the project. Target beneficiaries of this Child Survival project are 44,999 children under 5 years of age and 60,087 women of reproductive age.

After 17 years of civil war, the government has been rebuilding and expanding the health services network that was almost completely destroyed. In Nampula Province, health services remain seriously inadequate, often with long distances between health facilities, minimal and under-trained staff and only basic equipment and supplies. In spite of donor inputs, the MOH spending per capita in Nampula Province is only US\$0.70.

Mozambique suffers some of the worst maternal and child morbidity and mortality indicators in the world. Infant mortality in Nampula Province is 216 per 1000, under-5 mortality 319,² and maternal mortality 1100 per 100,000 live births.³

The goal of the project is to empower families and health care providers to improve the health and nutritional status of children under five and women of reproductive age through targeted interventions that improve maternal and child nutrition and the access to treatment and preventive measures for malaria.

There are five program objectives:

1. Improve infant and young child nutritional status through improved feeding practices, including exclusive breastfeeding for at least 6 months.
2. Improve maternal nutritional status through dietary changes, iron supplementation (pregnant women), and vitamin A supplementation (post-partum women).
3. Improve access to malaria treatment for both women and children.
4. Increase demand for and use of bed nets for malaria prevention.

¹ General Census of the Population and Habitation, National Institute of Statistics, Republic of Mozambique, 1997.

² Demographic and Health Survey, National Institute of Statistics and Macro International, 1997.

³ The State of the World's Children 2001, UNICEF.

5. Improve Ministry of Health capacity to provide quality services using the IMCI algorithms and support EPI campaigns.

CARE will use a two-pronged approach in implementing this project. One major strategy will be to improve the quality, access to and use of MOH services. The primary areas of focus will be on improved services by increasing knowledge and improving technical skills in malaria case management, nutrition and breastfeeding counseling, and vitamin supplementation of children under five and post-partum women. As the MOH has only recently begun introducing IMCI in 7 of the 21 districts of the province, CARE will aid in accelerating this process in the two target districts.

The second major strategy will be to empower communities to improve selected health practices. Focus will be on improving selected nutritional and malaria prevention practices amongst children under 5 years of age and pregnant women. In addition to improving practices, the project will increase health promotion at the community level via community health volunteers, including “model mothers”.

CARE’s local partners in the project will be the District Health Departments (DDS) in Malema and Nampula Districts. During the first 2 years, the project will be implemented in coordination with 7 health centers and 1 health post, to expand to 8 additional health posts during Year 3 of the project. HKI will provide technical support for the nutrition interventions, particularly micronutrient supplementation.

CARE will collaborate with three PVOs currently working in Mozambique—with Save the Children and World Relief to share lessons learned and effective interventions, and with PSI in the social marketing of insecticide treated bednets.

Malaria prevention and case management will require 45% of the project’s efforts. Nutritional improvement for women and children will require another 45%, broken down with 15% devoted to breastfeeding, 15% to complementary feeding, and 15% to maternal nutrition. The remaining 10% will be devoted to supporting MOH systems.

The CS XVII project for CARE Mozambique began October 1, 2001 and will end September 30, 2006. The budget for the project is \$2,044,446 with \$1,300,000 coming from USAID and \$744,446 to be provided by CARE’s match funds. The main authors of this document were Judith Lane, MPH, Nampula Health Sector Coordinator for CARE Mozambique and Dr. Elena McEwan, Technical Specialist for behavior Change Communication at CARE HQ. Dr. McEwan is also the main contact at CARE HQ for this project.

B. CS GP Data Form

C. Description of DIP Preparation Process

To begin involving potential project staff from the onset, the 10 candidates who had been short-listed as field staff were contracted to act as enumerators in the baseline survey. At the completion of the fieldwork for the survey, the six people who were chosen as project field staff were also invited to participate in the stakeholders' meeting.

The Project Manager, Deputy Project Manager, Nampula Health Sector Coordinator and CARE HQ's backstop, the Technical Specialist for Behavior Change Communication, prepared the agenda for a three-day stakeholders' meeting and invited partners from the appropriate provincial health programs (malaria, nutrition and IMCI) and the health directors from the two collaborating districts. In addition to Ministry of Health partners, the team invited staff from CARE's Reproductive Health in Nampula and VIDA agriculture projects, and the managers of the child survival projects of Save the Children and World Relief. All invitees attended with the exception of Save the Children and World Relief.

During the stakeholders' meeting, the Project Manager made a presentation of the proposal, describing the project's goal, objectives, interventions, locale and human resources. The Sector Coordinator made a brief presentation of the baseline results, and MOH representatives described the current situation in the province, as well as policies regarding the various programs. In two small groups, the participants selected activities, target groups, qualitative research needs, strategies and general timelines for malaria and nutrition. The larger group did the same for IMCI and immunization. The meeting ended with setting objectives and discussing sustainability issues.

Following the stakeholders' meeting, the Nampula Health Sector Coordinator and CARE Atlanta's Technical Specialist spent five full days researching further issues, collecting more information and writing the DIP. Members of the Children's Health team at CARE Headquarters completed the final writing of the DIP and the DIP review. Once approved and final revisions made, project staff and MOH partners will present baseline results and the DIP to participating communities, district level health staff and appropriate NGOs and PVOs in Mozambique.

D. Program Site Analysis

At the suggestion of the then Provincial Health Director, CARE chose two districts, Malema and Nampula-Rapale, in Western Nampula Province for the proposed project. The health indicators of both districts demonstrated a strong need for a focussed child survival project in the area. CARE's Reproductive Health Project has been implementing activities in Malema District since 1998, and its agriculture projects in both districts since 1997.

The total population of the two districts is approximately 259,000, with about 49,000 of this total children under five years of age, and 63,000 women of reproductive age.⁴ Of the children currently under 5 years old, approximately 10,780 are less than 12 months of age, 10,290 are 12-

⁴ General Census of the Population and Habitation, National Institute of Statistics, Republic of Mozambique, 1997. (These figures are based on annual population growth rate of 2.2%.)

23 months of age, and 27,930 are 24059 months of age. With a crude birth rate of 55.1 per 1,000 inhabitants in rural Nampula, it can be estimated that about 74,500 births will occur during the life of the project.⁵

During the first year of the project, activities will be implemented in seven localities with health centers and one with a health post (four facilities in each district), that will reach approximately 67% of the population in Malema District in 30 communities, and 55% in Nampula-Rapale District, also in 30 communities. During the third year, activities will be expanded to include all localities with health posts in the two districts, totaling approximately 120 communities.

Most of the population in Nampula Province (90%) is of the Macua ethnic group. In Mozambique, approximately 55% of the population are Christian, 17% Moslem and 20% do not practice a formal religion. However, in Nampula Province, the proportion of Moslems nearly equals that of Christians. Many people also maintain animist beliefs alongside one of the modern religions. The majority of the population—87.7% according to one socioeconomic overview of Nampula Province—engages in farming as its principal source of income and sustenance.⁶ The average annual per capita income for Maputo, the capital city of Mozambique, is \$1,189, while in rural Nampula it is only \$51.

Overall, Mozambique has been developing rapidly since the end of its 17-year civil in 1992, with a double-digit economic growth rate (estimated at 14% for 2001). This high rate is expected to continue over the coming decade. Although over 80% of Mozambicans are involved in agriculture, crop yields are about one-third of those of neighboring countries. The lack of education and poor health prevents most of the rural population from participating in the fast growing economy.

Socio-economically, women are at a clear disadvantage. For example, only 28% of rural women in Nampula Province have completed primary school and 0.2% have completed secondary school as opposed to 48% and 1.1% of men, respectively. Overall illiteracy rates are 92% for rural women and 65% for rural men in Nampula.⁷ In rural Mozambique, 28% of households are headed by women.⁸

Mozambique suffers some of the worst maternal and child morbidity and mortality indicators in the world. According to the DHS, infant mortality in Nampula Province is 216 per 1000 live births, under-5 mortality is 319,⁹ and maternal mortality is 1100 per 100,000.¹⁰

The DPS does not disaggregate morbidity data, but reports that the leading causes for seeking care for children are malaria, pneumonia, anemia, malnutrition and diarrhea. Malnutrition, while listed as the fourth cause, is, of course, an underlying factor of the other causes. In fact, the DHS estimates that malnutrition is related to 44% of all under-five deaths.¹¹ CARE's VIDA project

⁵ Ibid.

⁶ Pontara, N, *The Province of Nampula: A Socio-economic Overview*, 2000.

⁷ Demographic and Health Survey, National Institute of Statistics and Macro International, 1997.

⁸ Ibid.

⁹ Ibid.

¹⁰ *The State of the World's Children 2001*, UNICEF.

¹¹ INE and MACRO Demographic and Health Survey, 1997

conducted a baseline survey of nutritional status in 1997 using the Nutripox Model which showed that among children aged 2 to 5 years, 29.5% exhibited severe stunting (< 2 SD), and 24.6% exhibited moderate stunting (> 3 SD and < 2 SD). The VIDA project will be conducting an updated survey of this information this year. The new data will be used as part of the CS project baseline on anthropometric measures and will be reported in the first annual report.

Micronutrient assessments have not been carried out in Nampula Province, but a study conducted by the MOH, Helen Keller International, and UNICEF found high levels of anemia and very low intake of Vitamin A in the four provinces studied. In fact, 73.6% of all children and 52.8% of non-pregnant women were found to be anemic. The consumption of sources of Vitamin A or beta-carotene was also very inadequate.

Although many of the breastfeeding practices are good, such as immediate breastfeeding, giving colostrum and prolonged feeding, exclusive breastfeeding is practically nonexistent. In the recent KPC 2000+ survey conducted by the project, only 2% of children 0 to 5 months of age were exclusively breastfed in the past 24-hour period. Almost all mothers give water to their infants from the time of birth, introduce weaning foods at an early age, and give a limited number of daily feedings.

Women in Nampula begin sexual activity at a much younger age than men (14.7 years versus 19.9), presumably because first sex generally occurs with an older man. Many begin childbearing during adolescence—39.8% of women 15 to 19 years old already have had at least one child. Total fertility rate for rural women is 7.4. Only 2% of women in the province use a modern method of family planning.¹² (The contraceptive prevalence rate is 14.6% in the localities of the 3 districts where CARE has been implementing its reproductive health project since 1998.¹³) In the target districts, only 33.8% of births take place in health facilities (40% in Nampula and 28% in Malema Districts).¹⁴ In Nampula the average health facility serves more than 19,000 inhabitants, and there is one health care provider per approximately 2,000 inhabitants. The average distance to a health facility is about 12 km (7 miles).

Malema District has 3 health centers with maternity, 25 beds and 2 laboratory facilities that can diagnose for malaria, anemia, urinary infections, parasites and STIs, including HIV. These health centers are staffed by trained health care providers, at least of a medium level nurse and elementary midwife. Please see Appendix H for a detailed description of the educational profile of health personnel. In addition to the 3 health centers, there are 5 health posts staffed by an elementary nurse, and without beds, maternity or laboratory facilities. There is currently no doctor in the district, nor capacity for obstetric or other emergencies.

Type	#	Nurse/ Med Tech	Nurse Midwife	Auxiliary Nurse	Auxiliary Midwife	Auxiliary Pharmacist
Health center (Malema)	1	6	1	2	5	1
Health center (Mutuali)	1	3	-	1	4	-
Health center (Nacata)	1	1	-	-	1	-

¹² Ibid.

¹³ KPC 2000 Baseline Survey, CARE Child Survival XVII Project, 2002

¹⁴ Ibid.

Health post (Chihulu)	1	1	-	-	1	-
Health post (Cunvar, Morripa)	2	1	-	-	-	-
Health post (Moralelo e Nataleia)	2	-	-	1	-	-

In Nampula District, there are 4 health centers, one of which has the support of missionaries and is well-staffed, well-maintained and has a laboratory. In addition to the health centers, there are 6 health posts, 5 staffed by auxiliary nurses, and one by a basic nurse.

Type	#	Nurse/ Med Tech	Nurse Midwife	Auxiliary Nurse	Auxiliary Midwife	Auxiliary Pharmacist
Health center (Anchilo)	1	5	2	2	4	1
Health center (Rapale)	1	2	2	3	4	2
Health center (Namaita)	1	1	1	-	4	1
Health center (Maratane)	1	1	-	1	1	-
Health post (Namachilo)	1	1	-	1	-	-
Health post (Mutolo)	1	1	-	-	-	-
Health post*	7	-	-	1	-	-

* Namicohna, Saua-Saua, Muleheia, Namucaua, Natos, Caramaja, Mucova

Many people use traditional healers or informal vendors of medicines before they seek health care from the formal system. Ironically the in-kind costs of traditional healers are often higher than those of the formal system, especially as maternal and child health services are free in Mozambique.

In Nampula District, public transportation is widely available and affordable and most people have no difficulty with mobility. Malema town is located 160 miles from Nampula City and there are very few vehicles that travel to the district. However there is a daily train to and from the district that is fairly reliable and extensively used.

There are few changes from the proposal. The primary change is that the project will work in fewer communities in the first two years, and eventually expand to include more communities. Furthermore, as IMCI has not yet been introduced in the target districts, the project will train personnel from health centers in year one, and later from health posts in year two. This will allow sufficient time for health center staff to become accustomed to the approach before training and supervising others. Some activities described in the proposal (such as community-based growth monitoring and distribution of chloroquine) will be piloted in only a few communities because the Provincial Health Department would prefer to evaluate for acceptability and effectiveness before implementing on a wide scale. Additionally, the project will focus its capacity-building efforts with the MOH on auxiliary nurses rather than APEs (multi-purpose community health agents)—at least in Years 1 to 3—because this was decided by Provincial Health Department participants during the DIP preparation meeting with stakeholders. Lastly, changes were made to the budget originally submitted with the proposal due to a delay in acquiring match funding through the CARE-CDC Health Initiative (CCHI). Please see the revised budget included in Appendix A.

E. Summary of Baseline and Other Assessments

Up until the writing of this DIP, only the KPC 2000+ baseline survey, including the questions from the Rapid CATCH, was conducted by the project. To select communities, a list was compiled of all of the communities in each of the four districts, with their respective populations, using the most recent census lists. Then within each district, a sampling was done with the probability proportional to size technique to select 10 clusters of 10 in Ribáuè and Mecuburi, and 15 clusters of 10 in Nampula and Malema Districts. The survey team conducted 150 household interviews with women with children less than 24 months of age in each of the two project districts of Malema and Nampula-Rapale, and 100 interviews in each of two control districts, Ribáuè and Mecuburi. The questionnaires were written in Macua, and the interviews conducted in that language unless a woman preferred to be interviewed in Portuguese.

The project plans to conduct a situation analysis study and training needs assessment to evaluate knowledge, and diagnosis and treatment abilities according to protocols. The situation analysis will also include a material need assessment in essential equipment and supplies. This study will be used to design training and supervision strategies, content, and materials for health care personnel, as well as to ensure the minimal material needs and to address supply issues and client satisfaction.

Furthermore, focus group discussions will be conducted with women, men and other influential family members to understand the roles they play in the health care of their children. CARE's Reproductive Health Project in Nampula placed a huge importance on the man's role in reproductive health. In this child survival project, CARE intends to emphasize the role that both parents have in the health of their children rather than making it a "woman's" project. The Reproductive Health Project focuses on positive messages, such as "A man has the right to be involved in his child's health and education", rather than "A man has the responsibility to be involved in his child's health and education." In doing so, CARE acknowledges the man as an equal partner who can enjoy his children and not just be responsible for their economic needs. CARE intends to use this approach in this CSXVII project. Messages will be developed for various groups, including men and mothers-in-law.

The KPC 2000+ survey did not include an anthropometric assessment because CARE's VIDA Project will conduct this study in 14 districts in Nampula Province in April of this year. Overall, the baseline results were either highly positive or abysmally negative. However, CARE believes that building on the many healthy behaviors that the target population already practice can result in dramatic changes in the undesirable behaviors.

Since one of the objectives of the KPC survey was to monitor progress in CARE's Reproductive Health Project, 30% of the costs were contributed by that project, as well as five staff members for a period of three weeks.

Maternal Health

In Nampula District, 58.7% of women reported having received two or more anti-tetanus vaccinations during the last pregnancy, but only 49.0% in Malema District. The results of women who received professional assistance during the delivery of her child also show great differences between Nampula and Malema Districts, 40.4% in Nampula vs. 27.3% in Malema

District. These great disparities are undoubtedly due to the closer accessibility, more public transportation and availability of more maternal and child health personnel in Nampula District; whereas Malema is a large district that is very rural with little transportation available.

EPI

In Nampula District, 80.8% of the mothers interviewed had a vaccination card for the child in question, but 5.5% of these cards were not filled in. Of the children 12 to 23 months of age with cards, 62.3% had received 3 DPT and 3 polio vaccines, and 64.2% measles. In Malema, on the other hand, 62.6% had cards, but 15.3% were not filled in. Of those children 12 to 23 months of age with cards, 42.9% were vaccinated with 3 polio and DPT, and 61.9% against measles. Of the 209 children aged 12 to 23 months who had begun vaccination, 34% of them did not complete all of the vaccinations—DPT /polio 3, and measles.

Nutrition and breastfeeding

60.3% of the mothers began breastfeeding their youngest child within the first hour after birth, and 96% within the first three days. However, only 33.5% gave exclusive breast milk during the first three days; 64.9% gave breast milk and plain water. Only 2.0% of the children 0 to 5 months of age were given exclusive breast milk during the 24-hour period preceding the interview. One encouraging result was that 58.4% of children 20 to 23 months of age had received breast milk in the last 24 hours, indicating prolonged breastfeeding practices.

88.3% of children 6 to 9 months of age had received complementary feeds. Of the children 6 to 23 months of age, 42.7% had received foods rich in beta-carotene (6.1% pumpkin or orange sweet potatoes and 38.3% dark green leafy vegetables); 31.6% received protein-rich foods (meat, poultry, fish or eggs); 25.4% beans or peanuts; but only 14.6% oil or fats in their food. However, the number of feeds given daily was astonishingly low: 21% of mothers fed the child only once, 54.7% twice, and 19.5% three times. Only 1.4% of the children older than 6 months received 5 or more feeds in the past day.

Childhood Illnesses

55.4% of the mothers interviewed were able to spontaneously name at least two signs in their child that would cause them to seek care—85.5% mentioned high fevers, but only 3.6% difficulty in breathing. Some mentioned malaise (43.5%), lethargy (5.6%) lack of appetite (24.6%) or vomiting (11.7%). After fever and malaise, the most often mentioned signs were diarrhea and crying.

Malaria

Nearly half (46%) of the mothers said that the child in question had malaria in the past two weeks. Of these, 67.7% first sought treatment in a health facility, but only 41.7% within 48 hours of the onset of the fever. Of these, 67.8% of the children took chloroquine, but only 25% within 48 hours after the onset of the fever.

The results of the KPC regarding knowledge of the causes of malaria and means of prevention were disturbing. Only 17.3% of the women interviewed associated mosquitoes as the cause of malaria. Approximately two-thirds (65.7%) said they did not know the cause, and others attributed it to wind (6%), rain (8.5%) and others, most of who said leftover food (10%).

Only 4.4% have a mosquito net at home, and 4% of the children in question slept under a net the night prior to the interview—indicating that where there is a bednet, the youngest child almost always sleeps under it. Almost all of the nets were found in Malema District where the previous Child Survival XII project began encouraging the sale of bednets amongst local shopkeepers at the end of the project in 2000.

As presumptive treatment of malaria during pregnancy is not a part of the antenatal protocol in Mozambique, the baseline did not expect to find many women who had experienced this treatment. However, 0.4% of women said they had received antimalarial drugs during their pregnancy even when they had no symptoms of malaria.

A situation analysis study and training needs assessment are planned to evaluate knowledge, and diagnosis and treatment abilities according to protocols. The situation analysis will also include a material needs in essential equipment and supplies. This study will be used in designing training and supervision strategies, content and materials for health care personnel, as well as to ensure the minimal material needs and to address supply issues and client satisfaction.

F. Program Approach

The goal of the Child Survival Project is to empower families and health care providers to improve the health and nutritional status of children under five and women of reproductive age through targeted interventions that improve maternal and child nutrition and the access to treatment and preventive measures for malaria.

There are five program objectives:

1. Improve infant and young child nutritional status through improved feeding practices, including exclusive breastfeeding until 6 months of age.
2. Improve maternal nutritional status through dietary changes, iron supplementation (pregnant women), and Vitamin A supplementation (post-partum women).
3. Improve access to malaria treatment for both women and children.
4. Increase demand for and use of bed nets for malaria prevention.
5. Improve MOH capacity to provide quality services using the IMCI algorithms and support EPI campaigns.

CARE will use a two-pronged approach in implementing this project. One major strategy will be to improve the quality, access and utilization of MOH services. The primary areas of focus will be on improved services by increasing knowledge and improving technical skills in malaria case management, nutrition, and breastfeeding counseling, Vitamin A supplementation of children under five and postpartum women. In addition to improving services, the project aims

to improve processes via supportive supervision, in-service training, technical updates, “active” census, using data for decision-making, and a referral and counter-referral system.

The second major strategy will be to empower communities to improve selected health practices. Focus will be on improving practices through behavior change communication about IFA consumption amongst pregnant women, exclusive breastfeeding, improved complementary feeding, increased consumption of Vitamin A- and beta carotene-rich foods, and timely care-seeking. In addition to focusing on improving household level practices, the project will improve care seeking at the community level via community health volunteers (including “model mothers”), a referral and counter-referral system, “active census”, mothers’ groups and involvement of men. CARE will train and supervise Community Health Volunteers (CHV) to conduct IEC activities regarding malaria, promote community environmental prevention activities, and sell ITNs. It currently appears that the DPS will allow some communities to pilot the sale of chloroquine.

As the effectiveness, benefits, and mechanics of community growth monitoring are worked out, only two communities per district will be selected to pilot the activity and evaluate its worth before deciding to implement in all of the communities.

Mozambique began the introduction of the IMCI approach only last year. In Nampula Province, there are currently 27 people trained in 7 districts (not including Malema or Nampula-Rapale), 8 of those who are trained to be trainers. IMCI has been introduced only in health centers staffed with higher level health care personnel. There does exist a shortened community level IMCI manual that will be used to train APEs, but the MOH is still far from introducing IMCI at the health post or community level.

CARE’s local partners in the project will be the District Health Departments (DDS) of the MOH in Malema and Nampula Districts. During the first 2 years, the project will be implemented in coordination with 7 health centers and 1 health post, to expand to 8 additional health posts during Year 3 of the project. HKI will provide technical support for the nutrition interventions, particularly micronutrient supplementation. CARE’s VIDA project has a collaborative relationship with the National Institute for Agricultural Research and will provide sweet potato cultivars. Save the Children and World Relief have agreed to share lessons learned in child survival in general, and on the Hearth Model in particular. World Relief has agreed to host a team of the DDSs and CARE staff to visit their CS project in Gaza Province.

CARE’s reproductive health project already has an agreement with PSI in the implementation of its “clinic pack” for partner notification. To expand the agreement to include the social marketing of bednets will be one step further in strengthening this existing partnership. Bayer furnishes PSI with bednets via UNICEF and has agreed to give technical assistance to CARE in training, marketing, and supplying nets.

CARE Nampula currently has a reproductive health project in Malema District and agriculture projects in both Malema and Nampula Districts. The reproductive health community volunteers have achieved great success in increasing knowledge and behavioral change. CARE will take advantage of the trust and confidence these volunteers have already gained and suggest that their

communities allow them to add the child survival activities to their existing responsibilities. They have already expressed an interest in selling bednets and chloroquine. As each volunteer is already responsible for the reproductive health for a given number of families, they could easily include the malaria activities in their work—BCC, home visits, referrals for children with fever, and promotion and sale of ITNs. As they are already accustomed to organizing large community events, they are well prepared to organize community clean-up days and/or bednet re-treatment days with community leaders.

The second phase of CARE's VIDA project has a stronger nutrition component than the first phase. One of the main activities is the introduction of orange sweet potato runners to women. The CSXVII project will collaborate with VIDA in the distribution of the runners and VIDA extensionists will teach women how to cultivate the potatoes and multiply the runners. One activity of CSXVII will be to teach the model mothers how to prepare various recipes using the potatoes and possibly establish income generation schemes for them.

CARE Mozambique has no one who represents health at the national level in Maputo (except for in HIV/AIDS). Therefore, CARE will probably not play an important role in national planning and policy development in child survival interventions, but will advocate at the provincial level to pilot various activities. For example, the head of the provincial malaria program has agreed to pilot the sale of chloroquine by trained CHVs. The Reproductive Health Project has had good success in effecting changes in policies at the provincial level. When the project began, nurses would not prescribe hormonal contraceptives to women with no children, and would prescribe Depo Provera only to women with 4 or more children. After training, updating health care workers' knowledge and sharing the latest protocols of the WHO, they now provide informed choice to women who choose them. CARE's agricultural projects do have representation in Maputo, and so the CSXVII project will benefit from VIDA's efforts in introducing orange sweet potatoes with the National Institute for Agricultural Research.

As many of the interventions proposed have not yet been tried in Mozambique, CARE will have to move ahead carefully and methodically. For example, as mentioned above, the Provincial Malaria Program has agreed to pilot the community-based sale of chloroquine via volunteers, but only in a few communities. Therefore the CSXVII project, in collaboration with its district health department partners will have to supervise and monitor closely this activity. Another activity that CARE was hoping to pilot is the presumptive treatment of malaria in pregnant women. However, the Provincial Health Department is not yet ready to try this as presumptive treatment is unknown here and is confused with regular prophylaxis.

G. Organizational Development

Strengthening the PVO

At CARE headquarters, the Child Health Sector has recently revised its long-term strategy. It is doing so to build upon more than 15 years of lessons learned in child health and survival programming. The strategy calls for the development of innovative approaches and targeting of those countries such as Mozambique with the very highest levels of infant and child mortality. It also calls for documenting, disseminating and scaling up successful models such as this new

project. This is a weakness, which requires particular attention through prioritization, reorganization of workload as well as investment of CARE's own funds.

CSXVII will provide CARE an opportunity to create linkages and synergies between projects based in different non-health sectors such as agriculture and micro-finance. CARE is one of the few PVOs with capacities and ongoing projects (in Mozambique and elsewhere) in such a wide number of sectors and domains. CARE's two agriculture projects, VIDA and Passana, have organized groups of women to cultivate various crops, including orange sweet potatoes. The CS XVII project will provide an opportunity for CARE to expand upon its multidisciplinary approach to programming by introducing the use of produce in weaning foods. Furthermore, it may be able to build in income-generation activities for the community health volunteers by selling products made from newly introduced produce, as well as the sale of mosquito bednets.

One of CARE Mozambique's long-term strategic objectives (2002 – 2006) is the empowerment of national staff and reducing the country office's dependence on expatriate staff. Some of the activities identified to achieve these objectives are training in managerial skills and CARE's vision, mission and values. The health program in Nampula recently added a position of sector coordinator, of whom 30% of his or her time is to be devoted to senior staff development. The health program in Nampula is now composed of two national project managers and one international sector coordinator to oversee the health program. It was with the funding of this CS XVII project that allowed CARE to make this step forward in its promotion of national staff.

Strengthening the Local Partner(s)

The objective for building capacity of the DDS staff—and to a lesser extent DPS staff—is to provide quality care in selected interventions. CARE's training activities will increase DDS staff capacity in clinical skills, training of trainers, supervision and management.

Furthermore, the Provincial Health Department has many human resources not being used to the maximum because of limitations in other resources. For example, there exists a team of trainers in IMCI without resources to train others to expand to a province-wide approach. There is also a theatre troupe that cannot do health education activities because of lack of transportation, lodging and food. CARE field staff will assist the partner district health departments in conducting a SWOT analysis to identify opportunities and strengths that they may not be aware of and to form strategies to overcome internal weaknesses and external threats in order to maximize their use of human resources.

Community Capacity/Other Community Organizations

CARE's capacity building of participating communities is designed to enable their CHVs to analyze problems, choose feasible solutions, mobilize resources, plan, implement and evaluate actions, communicate health information in an effective way and operate through democratic group processes. CARE will work at the community level to empower them to identify and find solutions to the most common childhood and maternal health problems. Each community will decide how many and what type of CHVs they need in order to reach children and mothers living in high-risk conditions and encourage them to participate in CS activities. CARE will guide

communities in their selection of CHVs by describing the responsibilities and time commitments, and each community will select these volunteers as they deem appropriate.

The CHVs will serve as the principal liaison between MOH and families, and will be trained in community organization and mobilization, use of participatory techniques to disseminate health messages, counseling, and planning and evaluation of activities. They will establish a simple surveillance system to record main events that occur in the community such as births, deaths, illnesses, vaccinations, referrals, patient follow-up, and child census that will be used for elaborating plans with the district level MOH.

The CHVs from each community will decide how they are going to divide their community by sectors. Designating a limited number of households for each CHV will facilitate their conducting activities such as surveillance, home visits and counseling with neighboring mothers. It is expected that they will already have an established relationship with their neighbors and will be comfortable sharing their children's or own health experiences and doubts. If appropriate and feasible in Nampula, CARE may duplicate World Relief's model of having one mother be responsible for about 10 other mothers in her neighborhood.

The CHVs will facilitate women's group sessions and give educational messages in breast feeding, nutritional practices and malaria prevention and treatment. These group sessions will be important to facilitate mutual support amongst the women, and offer a forum to share ideas, doubts and experiences regarding child and maternal care. The CHVs will also be responsible for planning activities in coordination with the health post personnel, such as weighing sessions, National Vaccination Campaign Days, home visits and community clean-up days.

Training

The approach that the project will adopt is to encourage MOH to seek continuous improvement in child health care. The District Health Directors will choose two people from each district to be trained as facilitators—preferably the head of maternal and child health and the head of pediatric consultations. This first cohort will be trained in adult learning theory, behavioral change communication, and technical and administrative norms based on pre-established quality assurance standards. Technical areas include malaria, nutrition, and breastfeeding to improve the quality of MOH personnel performance. Management training includes teambuilding, leadership, negotiation and conflict resolution, and quality assurance. The quality assurance activities consist of quality of care assessments, exit interviews, logistics inventory, training needs assessment, use of data for decision-making, planning, monitoring and evaluation, and supervision techniques.

This core group of trainers will take the lead in designing and implementing the training plan for the life of the project in coordination with the provincial head of the nutrition program. A training needs assessment will be conducted early in the life of the project with MOH personnel responsible for delivering child care at all health units in the target districts. The core group will use the findings to develop training curricula in areas where the health care providers are weakest. The trainers will begin training other health care personnel working in pediatrics and maternal health in the first quarter of the second year.

Included in the TOT will be the design of a monitoring and evaluation system. Tools will be developed and used during monthly supervision visits to peripheral units to monitor the performance of health workers and to improve the quality of care by conducting in-service training in areas where they are weak. Beyond improving childcare at health units, MOH personnel will be taught how to train CHVs in using participatory techniques. Training curricula for CHVs will be done using adult learning techniques and materials to ensure that while they are learning new approaches of childcare, they are also learning how to disseminate educational messages and how to communicate effectively with mothers and other caretakers.

Training materials will be developed using images that transmit messages visually, so that even non-readers will be able to understand them. Some materials will have messages written in the local language of Macua, and others in Portuguese, based on the audience. These materials will be distributed to health workers and CHVs to be used in educational activities in the community and at health units.

The Nampula Provincial Health Department began implementing IMCI in 7 pilot districts (not including Nampula or Malema), and has accepted to allow CARE to implement IMCI in the two districts. The National IMCI Program already has a set of 7 modules for higher levels of health care provider, and a simplified module for community IMCI. Furthermore, tools have already been developed and will be used to monitor how health personnel are using the IMCI knowledge and skills in their daily work. CARE will collaborate in Years 1 and 2 with 7 health centers and 1 health post where there are appropriate levels of personnel for the full IMCI training program, and then expand in Year 3 to include 8 health posts with auxiliary nurses, using the simplified version of the training program.

H. Sustainability

CARE defines sustainability on three inter-related levels: lasting behavior changes, institutions with capabilities necessary to continue or replicate activities, and enduring financial support. Behavior changes must occur at the individual, household, community and institutional levels and be maintained over a period of time to be considered sustainable. This applies equally to a mother's child-feeding practice as it does to MOH staff keeping quality case registers.

At the end of the project, CARE expects that the MOH and communities will be able to carry on the following activities without CARE's assistance.

Indicators for sustainability:

- | |
|---|
| <ol style="list-style-type: none">1. DDSs have and implement a supervision plan for staff of health centers and posts.2. DDS staff following IMCI protocols for 80% of all cases of children under 5 years.3. 80% of DDS staff follow protocols for malaria, diarrhea and pneumonia case management.4. Sweet potato cultivars available and affordable in district markets for 80% of participating communities.5. Mosquito bednets available and affordable in district markets for 80% of participating |
|---|

communities.

6. 75% of CHVs implementing at least 4 health promotion activities per year.
7. All health posts have contact at least quarterly with the CHVs in their area.
8. 50% of DDS and communities maintain the active census.
9. Referral/counter-referral system functioning for 80% of CHVs and their corresponding DDS health staff.

CARE will evaluate the capacity of partners, both the MOH and communities, using the sustainability indicators listed above, assessing quality as well as quantity. Project staff will appraise progress towards achieving these objectives on a semi-annual basis using project HIS data and summaries of supervision reports.

CARE's reproductive health project has been very successful in linking the community with health services, and will replicate its strategies in the child survival project. First, CARE involves health facility staff in the training of any community volunteers and stresses that the volunteers are tied to the district health care system and not to CARE. Then a referral/counter-referral system is established between the community and health facility. Women often feel empowered to seek health care when they have a signed referral slip from a respected member of the community. Furthermore, health care personnel appreciate the educational work that the volunteers do to prevent illness and know when to seek health care. In the reproductive health project, the volunteers greatly reduced the client load in family planning clinics because they re-supply oral contraceptives in the communities. In the child survival project, the CHVs will be able to reduce the client load for cases of malaria where they are allowed to distribute chloroquine.

Since the start of the project, CARE has been working towards lasting and sustainable behavior changes at the individual, community, and MOH level. Financial sustainability is less likely to be achieved, because MOH does not have a policy to charge for consultation. The MOH management system lacks process, structures, and skills to initiate a cost recovery plan for introducing community level health workers such as CHVs, TBAs, and APEs? On the other hand, female MOH clients often lack economic resources to pay fees for consultation or medicines.

At the individual level, the CS project plans to leave improved knowledge and behavior for child care by mothers and caretakers. At the community level, the CS project will leave community structures defined by community members who will lead prevention and promotion activities in coordination with the health post. Skills gained by CHVs will be used in daily work to provide malaria treatment, nutritional care, and breastfeeding promotion. Recognition and cooperation from community members and MOH personnel will be a good incentive for continuing activities beyond the life of the project.

At the MOH, the project will leave management structures, logistics surveillance, the plan-do-check-act cycle for everyday activities, and the use of seven steps of TQM for problem solving. At the same time, MOH personnel will gain technical skills in nutrition, breastfeeding, malaria diagnosis, counseling and treatment to utilize in everyday work as appropriate.

The strategy that CARE will use to ensure lasting and sustainable behaviors at these three levels is to become a process facilitator to ensure that the MOH carries out project activities. It has been planned that the DIP will be included in the MOH annual plan. The MOH also has agreed to start strengthening coordination with CHVs. This coordination will be ensured through planning and scheduling meetings that will be held on a quarterly basis to evaluate the impact and quality of implementation. The peripheral health posts will meet with CHVs on a monthly basis to report on and schedule joint activities.

The MOH's project appropriation began with the Detailed Implementation Plan elaboration for the MOH representatives. Including the MOH inputs into the DIP was with the objective to adapt the proposal to MOH's needs, to define roles and responsibilities in project implementation, and to get project ownership by the MOH personnel. The three-day workshop with MOH authorities was very successful. On the final day, the Director from the Nampula District said "Now I know that I have the project in my hands." That comment from the District Director showed him the opportunity he had to plan according to his needs by prioritizing health units, selecting personnel to be trained, deciding on appropriate activities, selecting communities to work with, and approving pilot projects.

I. Behavior Change Strategies

The project will utilize an approach for planning and implementing a comprehensive, strategic set of interventions and activities that focus on changing behaviors at the MOH, community, and individual level to achieve project objectives. To design a behavioral change strategy, the project will address four key issues recommended in the Technical Reference Materials, and use it as a guide to design a qualitative assessment with mothers and with other stakeholders who influence mothers in child care.

The objective of the qualitative assessment will be to do behavior analysis:

- 1) Whose behavior needs to change? (mothers, grandmothers, in-laws, husbands, neighbors?)
- 2) Who will be the audience? (to identify which target group the project has to focus on)
- 3) What do they have to do? Is it feasible? Is it effective? (to prioritize the behaviors to start working with)
- 4) Why aren't they doing it now? Identify barriers and ways to best influence and support those behaviors. Identify positive deviants and search for why they are currently doing a particular behavior. What makes the difference?
- 5) What activities have to be planned to address the most influential factors in changing the behavior? What kind of materials will be needed to support those activities?
- 6) What other activities could be done out of the community to reinforce desired behaviors? (to ensure that the most influential factors are being addressed from different levels)

The following table shows how the project has proposed refocusing its objectives in behavioral terms:

Effect Objective	Behavioral terms
1. Improve infant and young child nutritional status through improved feeding practices, including exclusive breastfeeding for six months.	<ul style="list-style-type: none"> ▪ Initiate breastfeeding within one hour of birth ▪ Breastfeed exclusively for the first six months ▪ Practice frequent, on-demand breastfeeding, including night feeds. ▪ Children older than one year are offered food five times a day. ▪ Children older than six months being fed with sweet potatoes 3 time a week. ▪ Children's food is enriched with oil.
2. Improve maternal nutritional status through dietary changes and iron and vitamin A supplementation	<ul style="list-style-type: none"> ▪ Pregnant women receive iron supplementation ▪ Post partum woman receive vitamin A ▪ Women use family planning methods ▪ Family members help pregnant woman with work at home ▪ Pregnant women eat a larger quantity of food
3. Improve access to malaria treatment for women and children and increased demand for and use of bednets for malaria prevention	<ul style="list-style-type: none"> ▪ CHVs trained to distribute chloroquine to persons with symptoms. ▪ Health units with stocks of chloroquine and Fansidar. ▪ Clean-up campaigns being implemented by community. ▪ Referral system functioning
4. Increased demand for and use of bednets for malaria prevention	<ul style="list-style-type: none"> ▪ Communities with access to treated mosquito bednets (access to ITN points at the community) ▪ Families using ITNs to protect their children every night.
5. Improve MOH capacity to provide quality services using IMCI algorithm and support EPI campaigns	<ul style="list-style-type: none"> ▪ Health personnel in all health units use IMCI algorithm to treat child illness ▪ Supervision team using IMCI tools to evaluate quality care ▪ Logistic plan assuring stocks of essential treatment (ORT, AB, malaria, iron, Vitamin A, vaccines, supplies, transportation, cold-chain) ▪ MOH implementing a strategy to decrease missed opportunities ▪ Calendar for community outreach activities ▪ All children at health units receive vaccines as needed. ▪ Mothers bring their children when they are sick, or for growth monitoring and vaccination. ▪ Exit interviews with clients indicate customer

Effect Objective	Behavioral terms
	satisfaction with health services

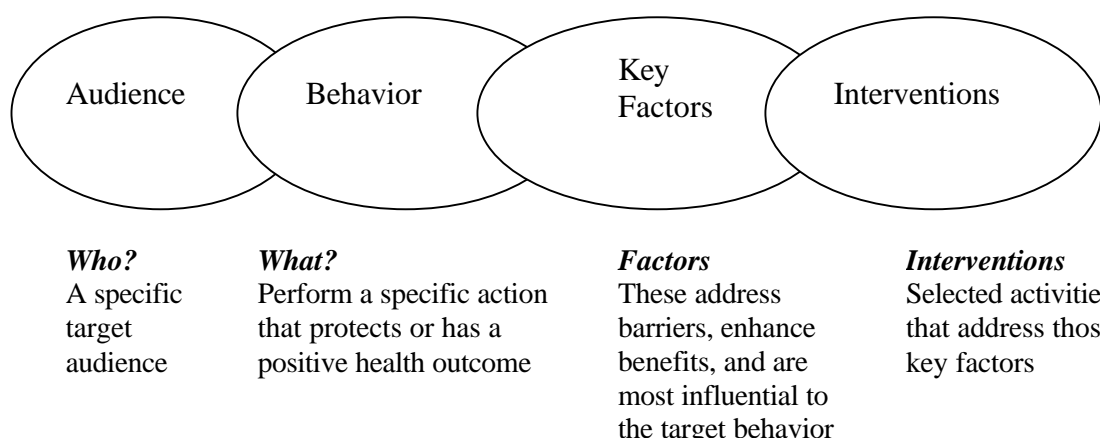
A standardized, step-by-step process is used to assess current behaviors and underlying factors. This model has been used with success in other CARE Child Survival Projects to design implementation plans and training curricula for different audiences: MOH, CHVs and families. The project has planned to carry out the first formative research during the last quarter of the first year.

Formative research will focus on the malaria and nutrition components to better understand the dynamic that takes place at the family level in these two interventions. Its use will be to prioritize audiences, identify feasible and effective behaviors to promote, to identify which factors influence behaviors to know preferred channels of communication, and at what levels to focus the program activities-individual, community, or health system.

Results from the formative research will be used to design and implement a behavior change communication strategy. This kind of qualitative assessment will be used on a regular basis to monitor changes and to provide feedback in order to update the BCC plan if necessary.

CARE will use the BEHAVE framework for program planning in this new project. The way CARE has analyzed this framework is as a chain where each segment is linked to the next one. This way of analysis has been very successful in trainings of trainers.

The BEHAVE framework, also called the Behavioral Change Chain is used to analyze behaviors to be addressed and to identify key messages that will address the behaviors that the project wants to change.



J. Quality Assurance

Quality is defined as client satisfaction of his/her reasonable needs. It is a way to ensure client satisfaction through getting all employees involved in a learning process of how to produce and deliver quality goods and services. A client can be internal or external and is a person who receives a service. Most of the time organizations are focused on external client satisfaction, but to ensure quality it is necessary to focus on internal clients as well, since they are providing the services.

Internal client satisfaction is related with shared leadership and team building. Effective teams have a sense of solidarity, affection, trust and cooperation. They also have developed effective communication and feedback skills. Internal client satisfaction depends also on defining roles and processes while staying focused on results.

CARE's Child Survival Project will initiate the interventions with the MOH carrying out a quality of care assessment in each unit where the project will work. Standards will be defined using national norms or protocols to evaluate the MOH's application of technical and management norms in malaria treatment and childcare related to nutrition, vaccination, and growth monitoring. In addition, it will also be evaluated on how the MOH has established coordination with CHVs and with other organizations working in health.

Quality assurance will be used as a baseline to know the current situation and as an evaluating tool to measure progress. Members of the training team will be trained in how to perform quality assurance using different approaches: observation during childcare (vaccination, growth monitoring, pediatric consultations), supplies inventory, and exit interviews with health care users.

Results from QA will be presented to MOH personnel, and a working session will be organized to analyze results. Using Total Quality Management tools, MOH participants and CARE will go through the seven-step process of: Reason for Improvement, Current Situation, Analysis, Countermeasures, Results, Standardization and Future Plans. An action plan will be developed from this process and will be evaluated in six months, applying new QA in health units that are implementing the plan. Results will be compared to the baseline. Once the problem has been solved, a standardization process will take place for all units, and a new problem will be addressed.

SECTION II: PROGRAM MANAGEMENT

A. Management Approach

The project will be managed by a Mozambican physician, who will be directly supervised by an expatriate health sector coordinator. Under the project manager will be a deputy project manager—a medical technician—who will supervise the field activities. The three field staff in each district will report to the Deputy Project Manager, who will be responsible to submit monthly statistics to the manager. The project manager will be responsible for submitting a quarterly Project Implementation Report to the health sector coordinator. The project manager has authority over staffing decisions, Annual Operating Plans, and the monitoring and evaluation strategy. The management style of the project will be democratic and participatory. The local reproductive health project has an annual retreat during which a SWOT analysis is conducted, progress against objectives is reviewed, and a work plan for the following year is made. All members of the project and collaborating MOH partners participate in the retreat. The CSXVII project will adopt this annual retreat for reflection on progress and future planning.

All project staff have already been hired, and they have been very involved in starting project activities, such as the baseline and negotiating with the MOH at the district level to prioritize the health units and communities with whom to start working. In each district, one nurse from CARE's staff will work closely with the participating health facilities in the district in training and supervision. Two other CARE staff will work with the communities.

A new health sector coordinator will be hired soon, since the current one has put her in resignation for the end of April this year. The HSC will be contributing 50% of her/his time to this project. Before her departure, the current HSC will assure project start up, train the CS team in planning, monitoring and evaluation and in adult education techniques. Another function is to coach CS field staff to become facilitators and train them in services to improve their performance.

For the first two years of the project, the Health Sector Coordinator will devote a great deal of support to the project manager to strengthen his management skills. She/he will lead Annual Operating Plans, budget elaboration and follow up, designing and implementing the monitoring and evaluation system, and team development. She/he will put the project manager in contact with key personnel from different institutions working in health (i.e. PVOs and NGOs working in health.)

The CS project will be backstopped from Headquarters by the Technical Specialist for Behavior Change based in Atlanta. She will provide technical support and pay visits twice a year to monitor the Annual Operating Plan, assist with the needs assessment, and suggest potential consultants for trainings and evaluations. The Technical Specialist led the process of the DIP preparation. During this visit to Mozambique, she started teaching national staff how to design annual operating plans, develop the M&E system, and design of different tools to collect the information. This first technical visit was also to share information regarding field experience with other CARE country offices that are implementing new initiatives in child survival, such as

the baby friendly initiative. At the community level, several country offices are involved in integral childcare, community organization, growth monitoring sessions and support groups.

The five-year work plan was already reviewed by the CS team, and they spoke regarding potential candidates with expertise in the training themes that have been planned. The Health Sector Coordinator and Project Manager will identify an internal consultant for specialized topics to conduct the trainings. Other sources that the project will look into will be the UNICEF (baby friendly initiative) and the Roll Back Malaria programs. For IMCI training, the project has already initiated coordination with the MOH at the national level to schedule trainings and use their curriculum and the nationally trained TOT team.

B. Human Resources

The following are the CARE staff who will implement the Child Survival XVII project in Nampula.

Title	Recruitment status	Paid or Volunteer	Main duties	% time devoted to CS
Nampula Health Sector Coordinator	To be recruited (potentially an expatriate)	Paid	Oversee all care health projects in Nampula, senior staff development, submit donor reports	50%
Project Manager	Hired	Paid	Oversee all planning, management, M & E, budgets, finances, staffing and reports	100%
Deputy Project Manager	Hired	Paid	Supervise all field activities	100%
Training & IEC Officer	Hired	Paid	Organize training events, participate in training & IEC materials and methods development	50%
Nurse trainers (2)	Identified, currently in training	Paid	Train and supervise health staff, including regular on-the-job training	100%
Community assistants (4)	Identified, currently in training	Paid	Work with community leaders to identify CHVs, including model mothers, train and supervise CHVs, assist communities to organize IEC events	100%
Community health volunteers (1 per ~ 50 households)	To be recruited	Volunteer	Make household visits to encourage use of ITNs, refer children with fevers,	8 – 10 hours / week

Title	Recruitment status	Paid or Volunteer	Main duties	% time devoted to CS
			treat for malaria (in some pilot communities), community mobilization for EPI campaigns	
Model mothers (1 per ~ 10 mothers)	To be recruited	Volunteer	Work with neighbors to improve breastfeeding, weaning and feeding practices; teach recipes with orange sweet potatoes	4 – 6 hours / week

In each district, CARE will collaborate with 4 health facilities. The principal personnel involved will be the two District Health Directors, 8 clinicians who do pediatric consultations and 29 staff who work in maternal and child health wards. CARE will also collaborate closely with the provincial heads of the malaria, nutrition, IMCI and EPI programs, especially in training, monitoring and evaluation, and IEC materials and methods development.

Additional crucial stakeholders to implement the project are CHVs. The CS project will propose to communities that in order to ensure a good relationship with mothers, each CHV will attend to 10 mothers. This number comes if we take into consideration that they will divide the community in sectors, and each CHV will carry on prevention and promotion activities with neighboring mothers.

Each group of CHVs will work with their nearest health unit. The MOH person responsible for the health unit will work with them to design a biannual plan to include all prevention and promotion activities. On a monthly basis, a meeting will be held for all CHVs to come to the health unit to give a report of their activities and to analyze their work in terms of successes and challenges. This will be a forum to share experience in lessons learned and best practices amongst the CHVs and also to receive feedback and in service training from MOH personnel. A CS field personnel will facilitate the first meeting until MOH staff attain skills for these kinds of meetings. In terms of community outreach, the MOH will get in contact with CHVs and monitor how they are performing in educational sessions, malaria diagnosis, and growth monitoring sessions.

The CS project will use in-depth interviews and focus groups at the community level to identify those people who are influential decision makers for maternal and child health. Decision makers that influence mothers to change a behavior will be included in educational sessions using mass media such as radio, theatres, puppet shows, and fairs. During growth monitoring sessions with children identified as underweight, health care workers will identify community members who influence mothers' behaviors and invite those decision makers to future growth monitoring sessions or visit them at home to raise awareness regarding child health status.

HQ technical assistance will come from a multi-disciplinary team formed by two Pediatricians with more than of twelve years of field experience in child survival and maternal health and

management, and one Nutritionist with more than twenty years of field experience in breastfeeding. Qualifications of the CARE HQ CS backstop staff are as follows:

Individual	Title	Areas of expertise
Sanjay Sinho, MD	Senior Technical Advisor, Children's Health	IMCI, training, neonatal survival, community participation
Elena McEwan, MD	Technical Specialist, Behavior Change Communication	Behavior change, health management and sector reform
Judy Canahuati, MPhil	Senior Technical Advisor, Nutrition	Nutrition, breastfeeding

C. Contingency and Security Plan

a. Potential dangers in CS program area

The Potential types of dangers CARE Mozambique faces are floods in the south and central regions of the country, drought in the south and in some districts of the central region and along the coast, and cyclones in the coastal zone. Other non-natural potential dangers are war (as a result of the presidential election dispute), and political instability in neighbouring countries.

b. CARE's overall Security Framework

CARE Mozambique's Security Policy works to reduce the risk of security incidents for CARE program staff and partner communities by establishing a security framework that is built on a positive security profile (acceptance strategy), and supplemented with protection and deterrence measures. As a result, CARE USA has developed the following international security principles that CARE Mozambique adheres to:

- 1) The safety of CARE's personnel and partner communities takes precedence over all administration, program and logistics activity.
- 2) As a priority, CARE staff analyze potential security level implications, and benefits and harms of project activities before implementation. CARE regularly undertakes benefit/harms assessments to weigh the expected and potential effects of CARE programs. During the benefit/harms analysis, CARE considers five categories: (1) Social, Attitudinal and Cultural Impacts, (2) Political Impact, (3) Impact on Personal Security and Freedom, (4) Impact on Institutional Capacity, and (5) Impact on Household Livelihood Securities.
- 3) Security considerations are imbedded in the Country Offices' program planning cycle using the following guiding principles:

Acceptance. CARE actively pursues a positive security presence by:

- Maintaining a 'low profile'
- Providing limited and highly targeted inputs
- Ensuring a high level of monitoring of all material inputs
- Emphasizing training and local capacity building

- Implementing projects in collaboration with local NGO and government partners
- Focusing on rights based, flexible, culturally appropriate and representational (gender, ethnic and age balanced) responses
- Maintaining transparent and clear communications with partner communities and agencies
- Establishing strong community-based relationships
- Communicating a clear rationale for geographic and group targeting

Protection. CARE works to maintain and improve protection for staff and projects by adhering to the following guidelines:

- Maintain situational awareness and information through close contact with operational agencies, local authorities and partner communities
- Establish and maintain clear chains of internal (in-country) and external (HQ level) communication and information system management
- Adhere to standards of established codes of conduct (the CARE International Code of Conduct and ‘informal’ interagency codes) and security guidelines

c. Ensuring Security for Staff

CARE Mozambique has just recently formed an Emergency Response Unit and is currently developing a contingency and security plan. CARE Mozambique’s Country Director is responsible for the development, review and update of the CARE Mozambique Country Office Security Plan. This Security Plan has recently been updated. CARE’s CS Program area has constant access to telephone, radio (voice and data) and email communications to the Country Office in Maputo. The Nampula office is in daily contact with the office in Maputo and if an emergency occurs, the CARE Country Office will coordinate with local authorities and the UN Security Office if necessary to determine the severity of the situation. The decision to evacuate project staff rests with the Country Director, in consultation with the Emergency Coordinator. If required, CS program staff will evacuate either by road or air transport, whichever is determined safest, to Malawi. If there were an acute and high alert emergency that required cross border evacuation by air, evacuation would be arranged by CARE Maputo to Johannesburg.

d. Plans to maintain CS Program Continuity

The CS program will be managed and carried out by Mozambican nationals, both from the CARE staff and partners. Therefore, even if the security situation deteriorates in the area of operation, national staff would not be evacuated and unless there is a threat to their personal safety, the project should be able to continue. Most of the distance support provided by technical personnel in Mozambique will be from national staff as well. Because CARE will work in close partnership with local organizations, i.e. the MOH, they will likely be able to continue the training, community organization and other CS Program activities with CARE’s long distance support without interruption.

D. Technical Assistance Plan

The technical assistance plan will respond to the training needs assessment conducted by the Technical Specialist for BCC during her visit for the DIP preparation. HQ will be responsible

for identifying and sending to the field useful technical resources to improve the CS team's technical and management skills.

Different strategies will be used to provide information for field staff. One is the participation of two CS team members in the Annual Child Survival Workshop, which will be held in Kenya in this first year to improve their knowledge and skills in Behavior Change strategies. These two people will train other CS staff and MOH trainers on the skills gained during the Child Survival workshop.

Also, the CS team and MOH from the District level will visit successful CS projects, such as World Relief in Gaza Province and the CARE CS project in Kenya to see community organization and best practices in child survival interventions. Bi-annual visits from the Technical Specialist for Behavior Change are also scheduled. During these field visits, communities and health centers will be visited to observe CS team performance, give feedback and provide training.

Table with technical assistance and calendar for key activities during the life of project:

Theme	Technical assistance	Date
In depth interviews, focus groups	Health Sector Coordinator (HSC) External consultant	First year
Quality assurance	Technical Specialist for Behavior Change Communication (TSBCC), HSC and External consultant	First year
Community organization	TSBCC, other CARE country offices	First year
Behavior change communication	HQ: Annual CS workshop	First year and continuous
Annual Plan	HSC	Annually
Budget preparation and monitoring	HSC Finance Manager	Annually and quarterly
Supervision system	TSBCC HSC	First year and quarterly
Monitoring and Evaluation System	TSBCC HSC	First year and continuous
Mid term evaluation	TSBCC HSC External consultant	Year three
Final Evaluation	TSBCC HSC External consultant	Year five

E. Information Management

Field offices and HQ communicate frequently by e-mail, telephone and faxes. The same occurs between Maputo and Nampula offices. The Nampula office is already connected to the internet and fax, and they also have an internal web to communicate with administration area and among themselves.

The role of HQ is to identify necessary information to update the country office in technical matters. Till date, the Technical Specialist for Behavior Change Communication has sent protocols and M&E tools developed by other CS projects to allow the Mozambique team to adapt according to their setting.

Quarterly reports will be sent to the Health Sector Coordinator to include the main activities being carried out and to record lessons learned and best practices. These will be used to prepare the annual reports to be sent to HQ and USAID.

F. Financial Management

The Project Manager has the authority to approve spending of up to \$5000 for project activities. Field officers send monthly financial reports to Project Managers who use it to monitor and compare project expenditures with project implementation to avoid under or over expenditures and allocate budget items as needed. HQ also receives the financial information from country offices on a quarterly basis, and then send it back to country offices through quarterly pipeline reports highlighting any over or under expenditures and budget burn rates.

G. Logistical Management

Workplan activities will be the guide to designing an annual purchase plan where the Project Manager will include purchasing of vehicles, equipment and supplies. This annual plan will be updated on a quarterly and monthly basis, depending on project needs. The CS team and administrative personnel from Nampula's office have to review the annual plan and prioritize which items are needed to be purchased first to ensure program activities. Advance planning will be key in order to avoid purchase delays. Additionally, the Project Manager will track the purchase status to ensure receipt of supplies on time.

H. Monitoring and evaluation

Program Goals and Objectives:

The Child Survival Project goal is to empower families and health providers to improve the health and nutritional status of children under five and women of reproductive age through targeted interventions that improve maternal and child nutrition and the access to treatment and preventive measures for malaria.

The project has selected five objectives:

1. Improve infant and young child nutritional status through improved feeding practices, including exclusively breastfeeding for six months.

2. Improve maternal nutritional status through dietary changes, iron supplementation (pregnant women), and vitamin A supplementation (post-partum women).
3. Improve access to malaria treatment for both women and children
4. Increase demand for and use of bednets for malaria prevention.
5. Improve MOH capacity to provide quality services using the IMCI algorithm and supporting the EPI campaign.

To achieve the objectives listed above, CARE will use two strategies:

- 1) To improve the quality of MOH services, through institutional strengthening the project will support the MOH to use protocols and norms to treat malaria and malnutrition using IMCI guidelines, and also using management tools that the MOH will design and implement to ensure access and supplies for proper child care.
- 2) To empower communities to participate in their health activities, and seek for quality care at MOH units.

The CS program will ensure the project activities through a monitoring and evaluation system that will be developed with the MOH and CHVs, so it can satisfy MOH and community need.

The monitoring and evaluation system will be divided in three sections: community information system, health information system and management information system. The community information system will record and monitor all CHVs' activities. A simple mechanism will be developed with CHVs where they can record their activities. The project will give them notebooks and pencils and show them how to register information such as census (children under five, pregnant woman, growth monitoring sessions, families using mosquito bed nets, women practicing exclusive breastfeeding, and post-partum women and children who received Vitamin A. They will also have a record of the number cleaning day activities and referrals made.

At the health units, they will use the health information system that the MOH has already developed. The project will review their tools to ensure that the information from the CHVs is included. If this information from the CHVs is not being included, then adaptations will be made to the tools to include the data in the MOH health information system.

The project's management information system was developed to record project activities, and use the information for program decision making. It began with the Detailed Implementation Plan design, where all strategic activities have been included to achieve project goals. The project has also identified the process indicators to monitor project activities, which will be monitored on a monthly basis. CARE field personnel will be responsible to get the data while at the field using different tools already designed by project staff. This data will be tabulated in a process indicators matrix that includes all activities for the life of project. The use of this matrix is to compare planned versus achieved activities on a quarterly basis. This management tool will be used for CARE, MOH, and CHVs to analyze context, barriers and decide new approaches and strategies that will be planned for the next quarter. Please see Appendix B for the process indicators matrix.

Activities described in Appendix C will be monitored using the process indicator matrix that will be fed by community information system, health information system, and the project information

system. In order to get project results, it will be important for all stakeholders to play an active role. For example, to improve the quality of health services, the MOH has to play a role at several levels, such as training personnel, supervising the use of protocols, and ensuring supplies. But in order to get families to utilize these services, CHVs have an important role to play in encouraging mothers to take their children to receive preventive health services and train mothers to recognize danger signs of illness and know where to seek help. Additionally, families have to ensure health practices and demand quality services from the MOH and CHVs.

Appendix D includes all effect indicators defined by these three levels that the project has focused on: MOH, communities, and families. Those will be measured at the beginning of the project to have a picture of the current situation, at the midterm of DIP implementation to evaluate if approaches are on track and to make necessary adjustments, and at the end of project to evaluate project achievement.

Another strategy that the project has defined is to use a situation analysis for the MOH and community baseline. The project will select an initial cohort of health units and communities and then move on to a second cohort. The situation analysis will be done at health units and communities and will be measured at the same three stages of project start-up, midterm, and final. At the time of writing the DIP, the baseline to identify knowledge, practices, and health coverage has been completed. Next steps will include designing and implementing a situational analysis at health units, which will focus on a training needs assessment and a quality care assessment. At the community level, qualitative research will be carried out using in-depth interviews and focus group discussions to understand the family dynamic with regard to child care.

The following is a table describing the monitoring and evaluation activity, the level at which it is to be conducted, useful tools, and the frequency at which the activity will occur.

Activity	Level	Tools	Frequency
Baseline/ Final Evaluation	Project	KPC Survey, Quality of child care checklist, Exit interviews, Logistic checklist.	Project start and end, Rolling baselines for QA at MOH facilities before activities start.
Midterm evaluation	Project MOH	Guidelines for: Interview with MOH, Interview with CHVs, Interview with APEs, Focus group discussions with mothers, Group interviews with staff.	During third year
Process indicators: Community information system	Project District MOH	Tools for: Census- children under five and pregnant women CHV reports describing- Vitamin A, chloroquine, iron, and de-worming distribution; referrals, cleaning day	Monthly Quarterly

		campaigns, educational sessions, support groups organized.	
Health information system	Provincial and District MOH Project	Tools for: Training event- theme, number of trainees, pre-and post test results, Checklist for child care Services, Productivity report, Vital status report, Referral format.	Monthly
Project information system	Project	Tools for: Annual, quarterly, monthly and weekly plan activities. Monthly and quarterly report format. Performance evaluation.	Monthly Quarterly and annual

I. Budget

Please note that the budget was changed from the initial proposal amount. The match amount was reduced from \$1,245,413 to \$744,446. A large portion of the match was to come from a pending project of the CARE-CDC Health Initiative (CCHI), which was to provide complementary malaria activities. The CCHI project did not begin as planned, and, therefore, adjustments were made to the budget before the start of the Child Survival project. Please see Appendix A for the revised project budgets.

J. Work Plan

Detailed work plans are in Appendix E, and the logic used to define them has been divided into four sections:

1) Project management: This includes all management activities that will be carried out to ensure meeting project goals. These activities include planning, organizing, designing, implementing, monitoring and evaluation of project activities to ensure programmatic coherency.

2) MOH activities: Activities to ensure quality and access to health services have been planned for the life of project with MOH personnel from the provincial and district level. These are divided into diagnosis, action plan, design, implementing activities, monitoring and evaluation.

At the MOH level, the project will start the intervention with a situation analysis study of quality assurance by observing MOH personnel during child care consultations, inventory of existing supplies and equipment at health units, exit interviews with mothers, and training needs assessment for MOH personnel. Results will be used to design and schedule a training plan, purchase supplies and equipment for child care consultations, and adapt the health services

organization to patients needs (e.g. distribution of human resources, improvement of ward areas, patient flow analyses, etc).

The MOH training plan is described in Section III. However, the project may also include management themes such as team development, negotiation between health care providers between health care providers and child caretakers of behavior changes that will be tried, and problem solving into the MOH training curriculum.

The MOH has also agreed to implement pilot activities starting with a designated number of health units and communities, monitor the progress, and then scale up to other health facilities and communities. Pilot activities will begin at the end of the first year and will include postpartum vitamin A distribution in Anchilo and Malema health facilities, introducing the Baby Friendly Initiative in one facility each in Malema and Rapale Districts, installing mosquito bednets for pediatric wards in three units in Malema and five in Nampula, and introducing IMCI in two other health units in each district.

Community outreach activities will be planned with communities and CHVs, in collaboration with appropriate health care personnel. Some key activities are National Vaccination Day Campaigns, supervision of growth monitoring sessions, and malaria treatment (chloroquine) distribution by CHVs.

3) Community Activities: At the community level, the project will also initiate the interventions with a community organization component. A presentation of the project to communities will be vital to get the approval and engagement to work in the project's activities. Selection of the CHVs will comprise another major activity by the communities. CARE will first facilitate brainstorming with the communities on the qualities that a good CHV should have. Once the participants have listed the qualities, they will name people in the community who have those qualities and suggest candidates with the final approval of project personnel, as oftentimes candidates are selected because of a close relationship with a village leader, believing that the person will gain materially by the appointment.

After CHVs have been identified, a training needs assessment will be carried out to prioritize themes in the CHV training plan. At the same time qualitative research will be done to get needed information to design the project's behavior change strategy and select the behaviors and key factors to design health messages.

The CHVs will participate initially in various activities including qualitative assessments, mapping, recording preventive activities, growth monitoring sessions, calling and organizing mothers for National Vaccination Campaign Days, and conducting educational sessions using different approaches such as support groups, home visits, fairs, puppet shows, and community theatre. If APEs are selected to be CHVs, they will continue with their curative activities such as distribution of chloroquine and referrals to health units. The MOH has also agreed to include iron tablets in the package that CHVs can offer. They will be also be responsible for the marketing of mosquito bednets to families with children under five and pregnant women, as well as other families who wish to purchase bednets.

4) Inter institutional activities: The project will also facilitate the institutional coordination between PVOs/NGOs and the MOH. One activity planned for the life of project is to act as a coordinating body to identify those institutions working in child health, present the project and establish fora or other means to coordinate meetings to plan and share lessons learned and best practices that could be useful to improve MOH service provision. A workshop is scheduled for the third year to share the experiences of pilot activities in malaria and nutrition.

SECTION III: DETAILED PLANS BY INTERVENTIONS

IMMUNIZATION

1. Current status/Coverage/Prevalence

Surveillance reports from the MOH show that in Nampula Province, the number of measles cases has increased from 3092 in 1996 to 4118 in 2001, with a large increase occurring in the last two years. Fatal casualties though have been decreasing in the last four years. There is no report of flaccid paralysis, however, it is included in the surveillance system that is used in all health units.

A report from 2001 indicates that measles coverage in children under one year in Nampula Province was 100%; similar figures are reported for Nampula District, and Malema District reported 98% measles coverage. DPT3 coverage at the provincial level was reported at 87%, in Nampula District at 99%, but in Malema District, the coverage was only 35%. Dropout from DPT1/DPT3 in Malema District was 41% and in Nampula 23%. Third OPV doses in Nampula Province were reported at 63%, in Nampula District 102%, and in Malema District 21%. BCG vaccine for Nampula Province was 98%, in Nampula District 108%, and in Malema District 50%. These very low immunization rates in polio, DPT and BCG in Malema District may be due to the fact that there was no District Health Director during an 11-month period of 2001 and the EPI program was not functioning to capacity. The registration of children in the census is also a problem to be considered in Nampula Province and in its 21 districts.

Regarding TT vaccines for women of reproductive age, the MOH records have the number of women vaccinated. Even though, comparing first and third doses applied, the number of WRA who received one dose of TT were 37,017, and the number who received three doses drops to almost half (19,176.) [in the baseline, we asked about 2 TT vaccinations. Should we discuss that instead?]

Findings from the CS baseline show that only 61.5% of mothers could show their child's vaccination card. Of those, the percentage of children between 12 and 24 months who were fully immunized reached only 51%, and the ones who received a measles vaccine were 67.6%. Regarding TT immunization, only 58% of women interviewed reported having received two or more doses of anti-tetanus vaccine. There are three possible explanations for these low statistics for childhood immunization. In some cases mothers had lost their cards, and in nearly 10% of the cases, the cards were not filled in. Alternatively, a lack of access to immunization services may keep rates low. Amongst the children 12 to 23 months old who began vaccination, 34% of them did not complete the program. It must be mentioned that there occurred a national 2-month stock-out of OPV in 2001.

2. Cause, current beliefs, knowledge and practices and care-seeking behavior

In-depth interviews and focus group discussions will be held with mothers and caretakers to better understand which key factors are influencing mothers' and caretakers' behaviors regarding

immunization. Some areas of knowledge that need to be improved are that vaccines are medicines that do not cure, but prevent, illness. Other messages are that if a child receives a vaccine, he does not need to receive more, and that the best vaccines are the ones given by injections. They often know that vaccines prevent some illnesses, but do not know which ones.

3. MOH Policy/strategies and case management policies/current services

MOH immunization policy is to vaccinate all children before completing one year of age, and services are available in all health centers every day from 7 a.m. to 1 p.m. The immunization schedule for children is shown in the following table:

Vaccine	0 month	3 months	4 months	5 months	9 months
B.C.G	1 dose				
Anti-Polio	0 st dose	1 st dose	2 nd dose	3 rd dose	
D.P.T		1 st dose	2 nd dose	3 rd dose	
Hepatitis B		1 st dose	2 nd dose	3 rd dose	
Measles					1 dose

4. Intervention specific approach (cross-reference with program approach section)

The CARE Child Survival Project will play a facilitator role in working with the strengthening of the MOH's management and technical skills to provide an immunization program that satisfies children under five and mothers' needs in having access to vaccines, given at a proper time and with required quality.

To increase access, CARE and the MOH will design and implement a plan to carry out outreach services. Needs assessments will be carried out at peripheral health units to identify supplies and resources needed to ensure program goals. Limitations already identified by the MOH are transport, cold-chain equipment maintenance and fuel for refrigerators and vehicles. To overcome those limitations, CARE will assist with transportation for the National Vaccination Day Campaigns to communities that will be prioritized based on low vaccination rates. The project also will provide gas for refrigerators to ensure cold chain protocols. These latter two activities will be on an interim basis until vaccinations rates are at an acceptable level. At mid-term, CARE with the MOH will have to make a plan for the MOH to be able to implement PAV without this exterior assistance. This is also an opportunity for CARE to get the local MOH involved in advocating with the MOH national level for more budget and resources to ensure a more sustainable EPI program.

Outreach visits will be part of the annual plan that the project and MOH at the District level will develop to include promotion and prevention activities. These will be done simultaneously to be more effective and to establish a holistic approach for children and mothers to decrease missed opportunities.

Another area that the project will focus on is training health unit personnel at the district level in technical and administrative norms, such as the vaccination calendar, signs and symptoms of vaccine preventable diseases, immunization safety, organization of fixed outreach activities, and

counseling techniques. This will help MOH personnel to decrease misinformation or myths that parents and caretakers may have. It will also facilitate educational sessions to discuss why it is so important to give the vaccines every time the child has contact with the health unit, even when he is not sick, and the implications of missed opportunities on a child's health. Communication and behavior change strategies will be designed and implemented to raise awareness of immunization importance and create better communication with parents or caretakers to reduce drop out rates.

The MOH already has a surveillance system that functions in each health unit to report vaccine-preventable and other preventable diseases; but the information is not being used for decision-making and planning at the district or local level. The project will train MOH personnel so they can perform simple data analysis and display their results for use by the community and the health units for decision-making. For example establishing the surveillance system and tracking coverage by community will help them to prioritize which communities should be included in their outreach plan.

CHVs will be key stakeholders in this effort to increase child immunization coverage. They will establish community-held registers that list children under five and mothers, and use them to record each child's immunization status, track vaccine defaulters, and identify infants who are not immunized, and either refer them to the health unit or invite them for the next National Vaccination Day Campaigns. As no such records are kept by the MOH, this activity will greatly aid the health facilities in improving their vaccination rates. During monthly meetings that will take place at the health facility that serves their communities, CHVs will inform the MOH of the current child immunization status. The information will help them to design a joint action plan where both stakeholders will define their roles and responsibilities. CARE's Reproductive Health Project furnished bicycles to its volunteers with the expectation that they be used for attending monthly meetings, making home visits, and collecting supplies at the the health facility.

5. Behavior change communication

Messages will be targeted to health care workers as to the importance of filling in vaccination cards with each contact, about the importance of avoiding missed opportunities (e.g. when an ill child is brought to a facility for care, to always check his/her vaccination card and vaccinating if necessary), and encouraging them to do health education talks with post partum women on the EPI. In Mozambique, annual prizes are given to districts with the best records in various programs. It could be an incentive to health care workers to know that when they vaccinate but do not record their work, their statistics are lower, therefore decreasing their statistics.

Furthermore, they will receive training in the importance of patient education in explaining that many illnesses are preventable only through vaccination. They will also learn the importance of explaining the mild and temporary side effects of some vaccines, but the long-term benefits to a child.

Men will be encouraged to ensure their children's complete vaccination through the organization of activities appealing to men. For example, soccer games could be organized with brief health

talks explaining the importance of vaccination and encouraging men to ensure that their children are fully vaccinated.

Women will be educated to know which diseases can be prevented by vaccination, but also their negative short-term side effects so that they are not alarmed by them. Because of the political history of Mozambique, there have occurred many cases of people believing that the predominant political party is trying to kill off members of an opposing party when they do not understand that there can occur unpleasant side effects from some drugs and vaccines. It will be stressed that it is important for women to keep their children's health records in a safe place to facilitate health personnel's work, and to not have to duplicate vaccinations.

6. Quality assurance

A quality of care assessment of vaccination services will be done to monitor MOH performance in using protocols to give vaccines to children and women of reproductive age. Proposed standards that will be included in the checklist will be verifying vaccine quality (refrigerator temperature) and stocks of supplies. Quality of care during procedures will be measured by evaluating technical skills to give shots or oral drops, counseling on what illnesses are vaccine preventable, potential side effects, and when to come back for the next vaccine. Finally, quality of care will be evaluated based on the presence and currency of records of vaccination status of children under five.

Results from the quality of care assessments will be presented to MOH personnel, and a working session will be organized to analyze results. Using Total Quality Management tools, MOH participants and CARE will identify a problem, analyze it for root causes and develop a plan to implement countermeasures to overcome it. On a semi-annual basis, the same study will be carried out to compare progress with the baseline. Once the problem has been solved, a standardization process will take place for all units, and a new problem will be addressed. If there is no progress, an analysis exercise will be done to find out the real root causes and develop another action plan.

7. Availability of drugs, vaccines micronutrients, equipment

During the three-day stakeholders' workshop, the MOH at the provincial and district level stated that they needed a lot of support to continue carrying out immunization campaigns. They lack sufficient motor vehicles to do community outreach because many of their vehicles are not running well due to lack of maintenance and fuel. They also face a shortage of syringes and needles. In some health units, the same needle is used several times to give injections, putting children and pregnant women at high risk for transmission of hepatitis B and HIV. Ensuring the quality of vaccines is another challenge for the MOH. There is no maintenance plan for cold-chain equipment and there is not enough money budgeted to ensure sufficient fuel to keep refrigerators functioning. In addition, health care providers lack skills in applying EPI technical and logistical protocols in their daily work, e.g. keeping daily records of refrigerator temperature on a checklist to ensure the quality of vaccines.

8. New, Innovative activities or strategies

Rather than focusing solely on the mother, CARE will involve men in their children's vaccination status, as well as health care workers in various quality of care issues such as patient education, careful record-keeping and taking advantage of all opportunities to vaccinate a child.

NUTRITION AND MICRONUTRIENTS

1. Current status/coverage/prevalence

DPS data from 1998 to 2001 show little change in the nutritional of newborns and children during this 4 year period. In Malema District, an insufficient growth rate in children from 0 to 5 years of age remained at 11%, although it had dropped to 7% in 2000. However, according to the standards in Mozambique, this is an acceptable rate. In Nampula District the rate dropped from 19% in 1998 to 16% in 2001. An acceptable rate of low birth weight is less than 7%, but in Malema District this rate increased from 14.1% in 1998 to 15.4% in 2001; in Nampula District it increased from 16.9% in 1998 to 17.4% in 2001. Both districts are considered well above the "serious situation" rate of low birth weights.

During the KPC survey, the CS XVII Project did not take anthropometric measures, because the VIDA project will soon do a widespread study in nutrition practices and anthropometric measures in children under five in 14 districts, including those where CARE is implementing the Child Survival project. The survey results will be used as baseline data, and will help to choose the first cohort of communities that show the highest malnutrition rates. The results will also be included in the first annual report.

2. Cause, current beliefs, knowledge and practices and care-seeking behavior

Although in-depth interviews have not yet been conducted, many beliefs are known from local staff who grew up and/or worked in rural areas. In Nampula, as in many other parts of Africa, people believe that breast milk does not contain enough water and that a baby will suffer from dehydration if water is not given. Regarding protein intake, generally in rural families the father receives the best and most meat as it is believed he needs it for strength to work in the fields. Women and children usually receive only what the man does not consume. There exist various beliefs around pregnant women eating eggs. Many people say that the child will be bald or be born with birth defects. Others believe that the woman will go into labor in an undesirable or inconvenient place rather than giving birth at home.

The lack of variety in the diet is related to two causes: lack of knowledge and poverty. The area of Nampula Province is a "bread basket" zone where an enormous variety of agricultural produce is grown. However, because selling produce, poultry and small livestock such as goats and pigs is the only means of obtaining cash, most farmers sell everything that they can and keep nothing for consumption at home. As most people do not understand that the consumption of fruit and vegetables is important, they do not include these aliments in the daily diet.

3. MOH Policy/strategies and case management policies/current services

The Nutrition Division of the MOH is divided in three different branches. The first is public health nutrition, which includes prevention and distribution of micronutrients. Until recently, vitamin A was given to children only during National Vaccination Days. Recently it has been introduced into the routine activities of health facilities that implement the EPI to decrease missed opportunities and to improve their nutritional surveillance and records. Now a child can receive vitamin A when s/he comes to receive vaccines or for a growth monitoring session. The first dose is given at 6 months of age, and then one dose every six months up to 5 doses. Low birthweight and underweight are tracked as part of their nutritional surveillance system. Data are obtained at the health units when children participate in growth monitoring sessions. Due to transportation problems, there is an irregular program of community outreach. Therefore access is limited to children who live near a health unit.

The second branch of the Nutrition Division is clinical nutrition, which focuses on rehabilitation activities for malnourished children. Cases that require hospitalization are referred by peripheral health units to nutritional rehabilitation centers, of which there are 8 in the province. The last branch is nutritional training for health workers, which has been divided into formal and informal education, with a priority to train new technicians. Currently there is only one trained nutritionist in the province based in Nampula City, therefore there are none posted in the districts.

MOH antenatal care protocols include a daily dose of iron folate during the second and third trimesters, however women are often given a supply during the first visit. In addition to IFA, presumptive treatment of worms with mebendazole is included in the MOH protocol, but it is rarely done. Children do not receive this treatment.

4. Intervention specific approach (cross-reference with program approach section)

Most MOH personnel at health units lack knowledge and skills in nutritional norms. To overcome that situation, the CARE Child Survival Project and MOH will develop a training plan using national nutrition protocols. Please see Appendix G for protocols. To develop the training plan, a needs assessment will be carried out. Tools to collect the information will be identified or developed and health personnel will be selected for interviews. Based on the results, nutritional themes will be prioritized with which to start the training. An integral part of the training plan design will be a monitoring system to ensure that trainees demonstrate increased knowledge and improved performance in daily work.

A training of trainers team will be selected and trained in adult learning theory, participatory techniques, counseling and behavior change communication. They will also learn to analyze the most influential factors contributing to behaviors that need to be addressed.

MOH personnel from the district level will be trained to provide effective counseling in nutrition and breastfeeding. They will also be encouraged to counsel men on the importance of making more food available to the family, including women and children, rather than selling the entirety of their production.

The Hearth Nutrition Model will be included as part of this intervention. The goal of this approach is to not only to rehabilitate malnourished or undernourished, children but also to demonstrate the importance of good feeding practices. This will help to reduce the prevalence of childhood malnutrition in the community and motivate the mothers and community to take broader, sustained action against malnutrition and poor health.

This model will be piloted where CARE implements its agricultural projects, VIDA and Passana. The CS project will work with women already organized in “agricultural groups” based on the rationale that they have food available at home. Mothers will be taught how to prepare balanced diets using foods locally available, including those from family gardens, and the importance of feeding young children at least five times a day in a separate bowl. Since this is a relatively new approach, CARE will work with the MOH, CHVs, and mothers to ensure that all stakeholders participate actively at the community level to overcome child malnutrition problems. Positive deviance will be sought among mothers to be used as models for others in the support groups.

Growth monitoring and nutrition counseling sessions will be carried out by CHVs every month. During these sessions the CHVs will focus on explaining to mothers how the child is growing (and how the child should be growing if there are discrepancies), give counseling and negotiate with them on the type of care the child will receive at home. The next time mothers come to a growth monitoring session, they will review the agreement made with the CHVs to find out what the mothers did well and what they could not accomplish and discuss joint solutions.

De-worming and micronutrient supplementation are a part of this integral approach. In the beginning, distribution will be done only by MOH personnel. When CHVs show the capacity to perform well the first set of skills, the project will negotiate with MOH authorities to let CHVs take over these distribution activities in their own communities, with supervision by MOH. For children who fail to gain weight despite improved feeding practices, CHVs will give a referral to health facilities for rehabilitation and where the child will have access to effective medical care. When the child is discharged from the health facility, he will be counter-referred to CHVs for follow-up and re-integrated into the growth monitoring sessions.

CHVs and TBAs will be taught how to conduct counseling sessions and give individual counseling to pregnant, post-partum and lactating women to protect their nutritional status. Examples of key messages that will be given are to increase and vary food intake, reduce workload, educational sessions in foods available locally that contain micronutrients, and the importance of daily consumption of fruits and vegetables. They also will receive information on how to enrich foods by adding extra oil or mixing foods. Pregnant women and mothers will be referred to health facilities to get micronutrient supplements in the first phase of the project as mentioned above, but eventually it is hoped that the DPS will allow CHVs to distribute IFA in their communities.

As many of the breastfeeding and weaning practices are good, the project will first focus on the positive behaviors with minor alterations on how to improve them. For example, CHVs and model mothers will praise women for their immediate and prolonged breastfeeding practices, but educate them on the importance and contraceptive benefits of exclusive breastfeeding, which

means no water. The project will promote exclusive breastfeeding not only to benefit the child but also to give an option for family planning through LAM. MOH staff will be trained in the LAM algorithm to use during breastfeeding counseling sessions with pregnant women. CHVs and TBAs will also be educated in key messages regarding the benefits of exclusive breastfeeding to prolong amenorrhea. They will laud mothers for their timely introduction of weaning foods, but stress the importance of variety and frequent feeds.

5. Behavior change communication

Messages for men will focus on the importance of contributing some of their horticultural production to the household, as well as poultry, eggs, and other small animals, rather than selling everything. They will also be encouraged to be involved in the nutritional rehabilitation of their malnourished children through home visits and educational talks with farmers groups. Male CHVs will play an important role in communicating with their peers.

“Model mothers” will communicate with other mothers via cooking demonstrations, home visits to motivate caretakers to adopt a holistic approach to a child’s well-being and health talks.

6. Quality assurance

A quality of care assessment baseline will also be done at growth monitoring sessions in the health units. Growth monitoring is supposed to be done monthly from birth to 5 years of age. Standard IMCI tools to monitor MOH performance during weighing sessions will be used.

A standardized checklist will be used to check stocks (iron, vitamin A, and de-worming tablets), evaluate technical skills such as recording weight and height of the child according to age, searching for illness in the past weeks, describing danger signs and when to seek for treatment, counseling regarding nutritional status, breastfeeding and weaning food promotion, checking vaccination cards, prescribing micronutrients as needed, and informing caretakers of the next visit. Lastly it will be verified if MOH personnel are maintaining updated records of the nutritional status of children under five.

Results from the quality of care assessment will be presented to MOH personnel, and a working session will be organized to analyze results. Using Total Quality Management tools, MOH participants and CARE will identify a problem, analyze it to get to root causes and develop a plan to implement countermeasures to overcome it. On a semi-annual basis the same study will be carried out to compare with the baseline. Once the problem has been solved, a standardization process will take place for all units, and a new problem will be addressed. If there is no progress, an analysis exercise will be done to find out the real root causes and develop another action plan.

7. Availability of drugs, vaccines micronutrients, equipment

According to national prenatal care protocols, all women are to receive a daily dose of IFA during the second and third trimesters of pregnancy. However, as the supplies of IFA are severely limited, most women are lucky to receive a 30-day supply for the entire pregnancy.

Furthermore, women in Nampula and Zambezia Provinces must purchase IFA, whereas it is free to women in the rest of the country. No one in the stakeholders' meeting understood the cause of this situation, and it is currently being investigated.

As vitamin A was distributed only on National Vaccination Days until very recently, there have been no problems of stock-outs. However, whether the current supplies will be sufficient now that it has been introduced into daily activities in health centers remains to be seen.

8. New, innovative activities or strategies

Most of the activities that the project will implement are new approaches in the target area, but CARE will give great effort to ensure sustainability through three specific activities. Two of them will take place at the community level and will be integrated into the community empowerment approach. The third will take place at the health units and will be part of MOH institutional strengthening. The project will facilitate the implementation of the following three nutritional models:

a) Integral Care to Childhood at the community level (ICC)

This approach is also being implemented by another CARE Child Survival Project in Nicaragua with technical support from BASICS II. It has been very successful in focusing on weighing children at the community level, using counseling and negotiation techniques to influence mothers in changing behaviors in breastfeeding and the use of adequate weaning foods. This project will use the same BCC approach to establish an effective relationship between CHVs and caretakers to find the most feasible ways to improve child nutritional status.

The project will train CHVs in breastfeeding, nutrition, and weighing techniques, so they can carry out all the activities at the community level. Exclusive breastfeeding for the first six months and the preparation of balanced diets with foods rich in nutrients like Vitamin A, to older children are some of the areas of education to be conducted by CHVs. Growth monitoring sessions will be planned on a monthly basis where the CHVs will show to each mother how his/her child is growing with respect to weight-for-age. In case the child is not gaining weight, the CHV will ask if the child has suffered any illness in the last month. When the problem has been identified, the CHV will initiate a counseling session with the mother and attempt to elicit a commitment from her regarding how she will take care of the child at home.

At the next session the CHV and the mother meet again to see how much she could accomplish and why she could not do it all. If the CHV identifies that the mother is being influenced by another person (grandmother, in-laws, or husband), she will be required to bring that person to participate in the next weighing session, or have the CHV make a home visit to get an agreement from all child caretakers. This approach will focus on improving knowledge of caretakers regarding the most common illnesses of children and how to recognize danger signs and make rapid decisions to seek help. Curricula developed in Nicaragua including training materials will be shared with CS in Mozambique and adapted for the local context.

b) Hearth Nutrition Model

This model will be piloted in communities where the VIDA and Passana Projects are currently implementing agricultural activities, including women's groups. The CS project will work with mothers already organized into groups, therefore, they have food available at home. Mothers will be taught how to prepare balanced diets using foods locally available, including those from family gardens, and the importance to feed the child 5 times a day in a separate bowl. Since it is a relatively new approach, CARE will work with the MOH, CHVs, mothers and other caretakers to ensure all stakeholders participate actively at the community level to overcome child malnutrition problems. Positive deviance will be sought among mothers to be used as models for others in the support groups.

c) Vitamin A distribution to postpartum women

Although it is the policy at the national level to distribute Vitamin A to postpartum women, people at the provincial level (even the Provincial Head of the MCH Program) remain unclear about the timing of the dose. However, during the planning workshop, personnel from the DPS and the two DDSs agreed to start a pilot project in one health center in each of the two districts--Anchilo in the district of Nampula and Malema Sede in the district of Malema. These two health centers will start the administration of vitamin A to all postpartum women who give birth in their units by setting an appointment for the mothers to return for their Vitamin A supplementation.

According to WHO protocols, women who exclusively breastfeed will receive 200,000 Ius within eight weeks, and those who do not exclusively breastfeed will receive it within six weeks after delivery. At discharge from health units, the women will receive a notification to come back to receive their supplements. They will also be encouraged to bring their babies with them if they had not been weighed and vaccinated after birth.

These two pilot activities will be incorporated into the nutritional surveillance system and will be supervised at the district and provincial level. Once it has proved to be successful, more health units will be incorporated into this new initiative. A systematization process will be developed and implemented to use the results for advocacy at the national level to establish a new protocol for all health units nationwide.

CONTROL OF DIARRHEAL DISEASE & PNEUMONIA CASE MANAGEMENT

They are not included as components of this project, but will be included in the IMCI strategy.

CONTROL OF MALARIA

1. Current status/coverage/prevalence

Malaria is endemic in most parts of Nampula Province, rural as well as urban zones, and prevalence and mortality has apparently increased over the years. However this is difficult to determine as before 1998, only cases confirmed by laboratory results were recorded. In 1998, all cases diagnosed for malaria, either symptomatically or by laboratory diagnosis, are recorded in

the health information system. The malaria control program is currently functioning in all health units in both districts.

Since the new surveillance system was introduced in 1998, cases and deaths were as recorded by the DPS as per the following table:

District	1999		2000		2001		Jan. 2002	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Malema	6,095	9	8,327	0	6,370	0	896	0
Nampula	3,199	0	13,491	9	20,404	1	1,073	0

It can be assumed that these numbers are under-reported as many people do not seek treatment for malaria at health facilities (32% did not seek treatment for their children under 2 years of age suspected of having had malaria in the past two weeks), but rather self-medicate or seek treatment from traditional healers. The incidence amongst the general population cannot be determined because many people are not cured by chloroquine and seek treatment a second or third time for the same case of malaria.

2. Cause, current beliefs, knowledge and practices and care-seeking behavior

When a child (or anyone, for that matter) has a fever, people automatically assume that it is malaria. According to the KPC Baseline Survey, mothers erroneously believe that the cause of malaria is rain, wind or leftover food. These beliefs are understandable because the population of mosquitoes is greatest during the rainy season, and there is generally a lot of wind before a heavy rain. Many people know that it is some kind of bug that causes malaria, and leftover food attracts flies and maggots, explaining this belief. Fewer than one-fifth of women, however, know that its cause is mosquito bites.

3. MOH Policy/strategies and case management policies/current services

USAID released a document in collaboration with WHO and UNICEF in February 1999 that stated, "Malaria is the country's leading cause of mortality and morbidity, and in January to October 1998 was responsible for about 44% of outpatient attendance in rural and general hospitals, nearly 60% of admissions in pediatric wards and about 29% of hospital deaths." Malaria surveillance has been functioning in all health units at the primary and secondary level since 1998. Prior to that, surveillance was kept only on laboratory diagnosed cases which was done in only a few health facilities.. The effectiveness of the new surveillance strategy has helped to increase numbers of cases reported over the years and has helped the MOH to have better idea of the magnitude of the problem.

Currently MOH policy is that first line treatment is chloroquine, which means all primary care health units use it to treat outpatients. However the MOH is very concerned over the level of resistance that has developed and is currently considering a revision of its policy on chloroquine as first line treatment. The above mentioned USAID document estimates that "chloroquine resistance in urban and peri-urban areas is high with parasite sensitivity of 28% and therapeutic efficacy of 61%." There are currently clinical trials going on in Southern Mozambique to study

the efficacy of artesimina as a possible first line treatment, perhaps in combination with other drugs. The second and third line treatments are Fansidar and Quinina, which can only be prescribed where there is a medical doctor or medium level technician to supervise the treatment and keep close watch to control side effects in vital organs.

Preventive activities are limited to educational radio messages broadcast in Portuguese and the local language of Macua, and spraying in urban areas and within a 5 km. radius of these areas. Some of the messages focus on environmental means at the community level such as removing stagnant waters, and others focus on health-seeking behaviors such as taking a child with fever immediately to a health facility.

The current policies on community-based distribution of chloroquine are currently in flux and rather ambiguous. For example, chloroquine can be sold in a shop, but only under the license of a pharmacist. Community health volunteers cannot officially distribute chloroquine, but the Provincial Malaria Program has agreed to CARE's piloting this activity in this project.

4. Intervention specific approach (cross-reference with program approach section)

At the community level, the project will work with CHVs in increasing awareness of the malaria problem. Qualitative research will be done to understand local beliefs, myths and knowledge of the population, home treatment of the disease, and words and terms used to describe it. Results will be used to design a behavioral change communication strategy to develop messages and to conduct educational sessions; especially those related to the increased risk of malaria during pregnancy, its consequences in newborns, and ways to prevent it. It also will encourage all pregnant women to seek antenatal care during pregnancy to encourage the taking of iron, thereby reducing the deleterious effects of malaria due to severe anemia. Even though CARE does not have MOH agreement on presumptive malaria treatment to pregnant women, the CS project will continue advocating with them to develop a pilot treatment for pregnant women in the two districts. The project will also promote the use of insecticide-treated mosquito nets by all pregnant women.

CHVs will conduct diverse community activities such as educational sessions, home visits, fairs to disseminate key messages for recognition of early symptoms and danger signs, and then seek early treatment from an appropriate provider. Community Health Volunteers (CHVs) will be a link between the community and the facilities. They will assure compliance with anti-malarial drugs, and counseling to families on the recognition of illness and care-seeking and home care.

PSI currently has a social marketing of ITNs project in neighboring Zambezia Province. PSI has agreed to do a memorandum of understanding with CARE to expand the network to Nampula Province and provide technical assistance on the marketing of ITNs. The nets are being supplied by Bayer's Zimbabwe office through UNICEF, and the prices are very accessible.

5. Behavior change communication

As with the nutrition intervention, messages will be targeted at men to protect their young children and wives, especially if pregnant, against malaria. The retail price of a bednet is

between 60,000 and 80,000 meticaïs (US\$2.50 to \$3.33), and the cost of re-treatment is only 10,000 meticaïs (US\$0.42). When men have money from the produce that they sell and purchase a bicycle, the minimum cost is about \$42. It is intended to use a strategy to motivate them to spend this minimal amount of money to improve the health of their family for something that is not a luxury but a necessity.

CHWs will work with community leaders and health care personnel to organize Malaria Days in their communities. During these events, theatre groups will perform to communicate messages on the cause of malaria and means to prevent it, particularly through the use of ITNs. CHWs will sell nets and instruct people on their use and treatment. (Later in the project when people have had their nets for more than 6 months, they can organize mass re-treatment if it is acceptable to the population.) Lastly, community mobilization will be done to organize removal of stagnant waters and other environmental measures to eliminate mosquito breeding grounds.

CARE will donate ITNs for each of the health facility beds in the two districts (5 in Nampula and 3 in Malema). The objective of this will be to facilitate patient education by health care personnel, and to communicate a non-verbal message that ITNs are a part of good health behavior.

6. Quality assurance

A quality care assessment baseline will also be done regarding childcare for malaria illness. IMCI tools will be adapted to evaluate if MOH personnel correctly use malaria protocols for diagnosis and treatment, using a holistic approach to evaluating a child's health that is already included in the national IMCI protocol. The checklist that will be adapted will include all of the diseases that IMCI asks for. The time that health care providers spend with mothers before the child receives care, and the time spent in each consultation will other indicators to be measured. Additionally, stocks at health units for antibiotics and malaria treatment to satisfy patients' needs will be monitored. Results of the evaluation will be used to design the training plan for the IMCI approach, and a plan to ensure logistics for childcare regarding antibiotics and malaria and antipyretic tablets. After IMCI trainings have taken place, a new study will be carried out to measure if the MOH personnel are using training knowledge in daily work and if logistic plans are being followed up.

7. Availability of drugs, vaccines micronutrients, equipments

The Child Survival project and MOH will devote 45% of project efforts to malaria because it is the number one cause of morbidity in children and adults in both Nampula and Malema Districts. Although chloroquine is generally available in health units and with APEs, it is not accessible to communities located far from these sources. CARE will provide seed money for the initial purchase of chloroquine which will be sold by CHVs for a minimal profit in order to purchase more stocks and create a revolving fund to ensure sustainability for beyond the life of project.

8. New, Innovative activities or strategies

MATERNAL AND NEWBORN CARE, CHILD SPACING & STI/HIV/AIDS PREVENTION

These interventions will not be included in this project

INTEGRAL CHILD SURVIVAL PROGRAMS AND IMCI

1. Current status/coverage/prevalence

This is a new initiative for the MOH in Mozambique begun in 1999. In Nampula Province, it started with pilot projects in seven districts. The MOH has already trained 27 people in IMCI in Nampula Province, of these 9 who were additionally trained to be trainers. The curriculum of 7 modules requires two weeks of training, including theory and practice at health units. A second, simplified one-week training program for lower level health care personnel has already been developed, but not implemented, as the MOH wishes to train personnel in primary and secondary health facilities before expanding the program to the tertiary level.

IMCI is a new approach that is not being applied outside the seven pilot districts in Nampula Province. The national program is basically at a standstill because of lack of funding to implement its program of expanding the initiative to more health facilities. They were very enthusiastic about the possibility of CARE sponsoring participants in future training seminars.

2. Cause, current beliefs, knowledge and practices and care-seeking behavior

People do not understand the connections between poor nutrition and vulnerability to illness. Even health care personnel do not counsel caretakers of ill children and pregnant women on the poor health outcomes of a deficient diet and illness and poor pregnancy outcomes.

3. MOH Policy/strategies and case management policies/current services

It is a recent priority of the MOH to introduce the IMCI approach into all national health care. However, it has been delayed in the training of health care personnel even at the primary and secondary levels of the health care system because of financial constraints and exterior support. This approach is being funded entirely by external funding, and the program is being delayed because of this. Many training seminars have been scheduled and then cancelled because of promised funding that has not come through.

4. Intervention specific approach (cross-reference with program approach section)

The CS project will support establishing this approach at the health units where the project will be working by sponsoring trainees of the level to participate in the two-week course, and contributing towards the costs of trainers. CARE intends to support the costs of trainers to train personnel in the target districts, and requesting that the DPS support the expenses of other trainees from other districts. CARE has had success with this approach in its reproductive health project, where the project needed to train a fairly small number of people (for example lab technicians), but wished to maximize the costs and benefits of a seminar. It is assumed that the

DPS will decide to take advantage of the opportunity to train many people at a much reduced cost.

Once the medium level of health care providers who work in child health are trained, the MOH will allow a lower level of health care provider to be trained in the one-week course. It is expected that during the first two years of the project, all medium level health care workers in child health will be trained. Then a cascade training of lower level health care workers, and finally CHVs will be trained in years 3 and 4 of the project.

The project will also work in adapting the monitoring and evaluation system developed to monitor IMCI application at health units, and eventually in the community. The results of initial monitoring visits will be used to develop in-service modules for supervision.

5. New, Innovative activities or strategies

In the third year of project implementation, the MOH at Provincial and District level agreed to initiate two pilots in Anchilo and Malema health units. These two units were selected because they are the ones that have skilled human resources, supplies and equipment. A close monitoring and evaluation will be done by the MOH at the Provincial level. Depending on the success, they will start implementing the approach to other health units that meet the minimum requirements.